

Abstract of the Disclosure

A self priming pump system that includes a motor coupled to a centrifugal pump for driving the centrifugal pump. A separator having a reservoir is provided for storing a limited amount of pumped fluid in advance of the centrifugal pump. A vacuum source provides a vacuum suction to the reservoir to draw pumped fluid into the reservoir to prime the pump. To increase the reliability of the vacuum pump system, a deflector and/or extension may be provided in the reservoir to help prevent pumped fluid from entering the vacuum pump input. Also, the configuration of a tank used to store liquid for the vacuum pump system may be configured to separate and collect sediments near a drain port, which then can be easily drained. For positive head pressures, one or more valves may be used to prevent pumped fluid from escaping the reservoir, if desired.